SIR,—Dr Nancy Redfern reported a case of dihydrocodeine overdose in a patient with hepatic and renal impairment of unknown aetiology. It is likely that rhabdomyolysis, occurring as a result of the patient lying in a semiconscious state for a prolonged period of time and, to a lesser extent, as a result of the biochemical abnormalities observed on the patient's admission.

Muscle necrosis would result in the high activities of alanine and aspartate transaminase measured, without producing appreciable abnormalities in the other indices of liver function. The discrepancy between the slightly raised y-glutamyltransferase activity and the considerably raised aspartate and alanine transaminase activities is against the presence of appreciable hepatocellular damage. There is further discrepancy between the grossly raised potassium (7.4 mmol (mEq)/l) and creatinine (614 μ mol/l (6.9 mg/100 ml)) concentrations and the moderately raised urea concentration (20.3 mmol/l (120 mg/100 ml)), which is characteristic of rhabdomyolysis. Rhabdomvolvsis would also have contributed to the deterioration of renal function and the need for temporary peritoneal dialysis.

It would be interesting to know whether other metabolic features suggestive of rhabdomyolysis were present in this patient, including a raised creatine kinase activity, myoglobinuria, hypocalcaemia, and hyperphosphataemia. Rhabdomyolysis is a more common cause of acute renal failure than was once appreciated and is probably still underdiagnosed.

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***We sent copies of these letters to the author, who replies below.—ED, BM?.

SIR,—The suggestion that the considerably raised transaminase levels resulted from rhabdomyolysis is very reasonable. Unfortunately, I have been unable to obtain details of the serum calcium and phosphate concentrations or creatine kinase activity. The only urine specimen taken was not tested for myoglobin; renal failure then supervened.

If one assumes that the patient's hepatic function was reasonably normal and that drug metabolism was continuing at the normal rate, the prolonged narcosis is surprising. One possibility is that active dihydrocodeine metabolites are responsible, or that the assumptions about normal hepatic function are incorrect. It may be that the patient ingested other substances that enhanced and prolonged the opiate like narcosis and that were also reversed by naloxone. Unfortunately, one cannot distinguish between these possibilities with the data available.

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Sport for tall

SIR,—I thank Dr P L Thomas and Dr G N Fuller (8 October, p 1069) for drawing my attention to the recent welcome introduction of the world lightweight rowing championship for crews of men with an average weight of

70 kg and with no individual weighing more than 72.5 kg. It is regrettable that no such events are held for women and that the organisers of the Olympic Games do not yet recognise the need for lightweight events. Because of this lack of recognition, the Eastern block countries do not compete in these events even in world contests. Clearly some nations are predominantly guided to encourage only those sporting activities that are recognised in the Olympics. In turn the media also ignore unrecognised sporting activities. Consequently, thousands of potential enthusiasts are denied the opportunity of participating in many such events.

I am surprised that as the medical officer of the Amateur Rowing Association Dr Thomas feels that a lightweight category is fitting for rowing but is unenthusiastic about the introduction of grading in throwing events. He also appears to have confused the terms lightweight and underweight. I am suggesting lighter categories for throwing events in the same sense as the existing lighter categories in rowing and boxing. Lighter categories are certainly not underweights, they are lighter in weight because they are shorter in height. In contrast, an underweight falls below the 5th centile of weight for height and frame size. It is not appropriate to recommend sporting categories for such people.

Dr Thomas also remarks that the Olympic Games are for the élite athletes of the world. His statement needs an amendment; the Olympic Games are for the tall élites of the world. Of the 5000 élites taking part in the Olympic Games, only the taller élites are able to get through to the finals. The saying "the big good 'un will always beat a small good 'un" is well demonstrated in the heats.

Dr Fuller questions whether enjoyment of sport derives only from international success. Certainly not, but I would like to know if there is any group of, for example, basketball players at national, regional, area, university or school, or any other lower level which consists of players of average height.

My pleas for grading in sport are not for the very short; they are for those near average height. It is regrettable that shorter but able aspirants who possess all other desirable attributes are effectively debarred from the higher levels of competition in the large majority of sporting activities of every nation. The merits of manmade rules can only be impartially examined by an independent reviewing body.

T KHOSLA

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 $*_*$ *This correspondence is now closed.—ED, *BMJ*.

Improving medical meetings

SIR,—May I add a footnote to the admirable series on improving medical meetings (22 October, p 1201; 29 October, p 1286) by briefly describing a method of "registrant participation" which we introduced at the first European Congress of Obstetric Anaesthesia and Analgesia in Birmingham, used again at the second congress in Rome earlier this year, and will adopt in Dublin in 1986 for our third congress.

Each half day session is opened by three panel speakers, who severally present a 20

minute paper on an aspect of the theme under review. The audience then disperses in previously designated groups of 15-20, each to a separate peripheral room. Under the leadership of a chairman the main papers, and closely allied topics, are discussed. After about half an hour, while most of the registrants are having tea (or coffee), the discussion chairmen appraise the panel chairmen of the points which their individual groups would like to hear answered or elaborated on by the three speakers. The entire audience then reconvenes and the panel chairman invites the speakers to comment on the points raised.

The European Congress of Obstetric Anaesthesia and Analgesia attracts to its meetings obstetricians, anaesthetists, neonatologists, midwives, and obstetric physiochherapists, and the format which I have outlined is particularly useful in encouraging the active participation of many who would be reluctant to voice an opinion, or to relate clinical experience, before a large assembly. As the constituent membership of each discussion group remains the same throughout the congress, individual confidence, and with it ease of communication, grows as the congress progresses.

The evidence I had strongly suggests that a congress run in this way provides, certainly for a multidisciplinary audience, an excellent forum for uninhibited discussion by all. I strongly commend adoption of the format by others, though I suspect that for a congress attracting many more than 500 delegates it would be unwieldy.

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Fatal heat stroke in a long distance runner

SIR,—We wish to suggest an alternative interpretation of the findings of Dr J A G Whitworth and Dr M J Wolfman (1 October, p 948), describing the terminal events of a long distance runner who developed a metabolic derangement which included a progressive acidosis and body core hyperpyrexia.

Malignant hyperpyrexia (malignant hyperthermia) is usually encountered under anaesthesia during which certain "trigger" drugs are administered; these include halothane and suxamethonium. Malignant hyperpyrexia is characterised by a progressive and inappropriate rise of body core temperature, and mixed respiratory and metabolic (lactic) acidosis, muscle spasm or rigidity, hyperkalaemia, consumptive coagulopathy, etc. In about half of cases histological examination of muscle shows abnormalities of a non-specific type, indicating a primary muscle abnormality. The mortality is around 40-50%.

In North America several cases of malignant hyperpyrexia have been reported during intense exercise and during emotional stress in subjects not under the influence of trigger drugs.¹² When assessing members of over 150 families with malignant hyperpyrexia from Britain, we have not encountered "awake triggering" of malignant hyperpyrexia, yet from the description of the clinical details observed in the long distance runner, there were features similar to a malignant hyperpyrexia episode.

From the published account the patient, a